C.S.L. OMMANNEY

THE CANADIAN ASSOCIATION OF GEOGRAPHERS

DIRECTORY

L'ASSOCIATION CANADIENNE DES GEOGRAPHES

ANNUAIRE

1988

Supplement to *The Canadian Geographer,* Vol. 33, No. 1, 1989
Supplément à la revue *Le Géographe Canadien,* vol. 33, no. 1, 1989

Compiled and Edited by/Recueilli et rédigé par
PROFESSOR WILLIAM BARR
DEPARTMENT OF GEOGRAPHY
UNIVERSITY OF SASKATCHEWAN

90-06492/

Canada / National Hydrology Research Institute
Inland Waters Directorate
Environment Canada

Canada / Institut National de Recherche en Hydrologie
Direction Générale des Eaux Intérieures
Environnement Canada

11, Innovation Boulevard
Saskatoon, Saskatchewan
S7N 3H5
(306) 975-5718

Personnel

Director/Directeur:

T. Milne Dick

Chief Scientist:

V. Klemeš

Current Research / Projets de recherche en cours

Hydrological application of cumulative processes (V. Klemeš)

Recent Publications / Publications récentes

Environment Canada	*National Hydrology Research Institute: Annual Report 1986-87* (Saskatoon: Environment Canada, National Hydrology Research Institute, 1987), 24 pp.
Environnement Canada	*Institut national de recherche en hydrologie: Rapport annuel 1986-87* (Saskatoon: Environnement Canada, Institut national de recherche en hydrologie, 1987), 24 pp.
T. M. Dick	*Scientific Research Programme: National Hydrology Research Institute* (Saskatoon: Environment Canada, National Hydrology Research Institute, NHRI Contribution No. 88038, 1988), 39 pp.
———	Drought prediction: a hydrological perspective, in D. A. Wilhite, W. E. Easterling and D. W. Wood (editors), *Planning for Drought* (Boulder: Westview press, 1987), pp. 81-94.

——— Reply to comment on "Dilettantism in hydrology: transition or destiny?" by Z. W. Kundzewicz, *Water Resources Research*, Vol. 23, No. 10 (1987), pp. 2011–2012.

——— and I. Klemeš. Cycles of finite samples and cumulative processes of higher orders, *Water Resources Research*, Vol. 24, No. 1 (1988), pp. 93–104.

Ground Water Division / Division des eaux souterraines

Telephone: (306) 975-5743

Personnel / Personnel

Chief / Chef:

J. A. Gilliland

Research Personnel / Personnel de recherche:

D. Craig, G. Grove, L. M. Johnston, J. Kwong, D. McNaughton, K. J. D. Ridley, A. Vandenberg, E. Yanful

Current Research / Projects de Recherce en Cours

Hydrological Processes and Climate Change

Freeze-thaw, soils and ground water (Kwong)

Ground water investigations in Wood Buffalo National Park (McNaughton)

Land drainage modelling (Vandenberg)

Hydrogeology of fractured tills (Yanful)

Man's Interaction with the Hydrological Cycle

Faculity for indoor aquifer testing (FIAT) (Johnston)

Acid neutralization in ground water flow systems (Craig and Johnston)

Toxic rain/LRTAP in northern and western Canada (Craig)

Ground water research feasibility studies (Johnston and Kwong)

Pesticide inventory and ground water (Grove)

Ground water pesticides studies in western Canada (McNaughton)

Contaminant transport in the vicinity of landfills in western Canada (Ridley)

Ground water contaminant modelling (Vandenberg)

Deep well disposal (Grove)

Use of sand cusion as primary contaminant barrier/liner at landfill sites (Ridley)

Ground water use and contamination in Canada (Grove)

Ground water technology transfer (Grove)

Northern Water Systems

Measurement of hydrogeologic parameters of permafrost and ground water (Craig)

Three-dimensional distribution of permafrost (Craig)

Laboratory studies of mass and heat transport in support of the permafrost/ground water programme (Kwong)

Ground water/permafrost (Johnston)

Understanding the thermal regime in a permafrost environment (Kwong)

Recent Publications / Publications récentes

T. Carter — *Facility for Indoor Aquifer Testing (FIAT)* (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, NHRI Contribution No. 87006, 1987), 34 pp.

H. A. M. Chew — *Aluminum Contamination of Ground Water: Part I, Methodology for Analysis and Sampling* (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, Internal Report, 1986), 30 pp.

D. Craig — with J. A. Nicholson and N. W. Foster, Precipitation, surface and subsurface water chemistry in a tolerant hardwood forest basin, *Proceedings, International Symposium on Acificiation and Water Pathways* (Bolkesjo, Norway, Vol. 1, 1987), pp. 91–100.

L. M. Johnston — *Ground Water: Why Worry?* (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, 1987), 18 pp.

——— — and D. Craig, *Status Report: Ground Water Studies in the Acid Rain Program* (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, NHRI Contribution No. 87003, 1986), 17 pp.

——— — and D. Craig, *Turkey Lakes Water Study: Hydrogeological Instrument and Aquifer*, Revised Edition (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, NHRI Contribution No. 87004, 1987), 27 pp.

D. McNaughton — *Ground Water Issues in the North* (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, NHRI Contribution No. 87009, 1987), 23 pp.

A. Vandenberg — *A Physical Model of Vertical Infiltration, Drain Discharge and Surface Runoff* (Ottawa: Environment Canada, National Hydrology Research Institute, NHRI Paper No. 25; Inland Waters Directorate, IWD Technical Bulletin No. 137, 1986), 57 pp.

V. Wasiuta — *Feasibility Study: Artificial Recharge in the Prairie Provinces* (Saskatoon: Environment Canada, National Hydrology Research Institute, Ground Water Division, NHRI Contribution No. 87007, 1987), 86 pp.

Surface Water Division / Division des eaux de surface

Telephone: (306) 975-5749

Personnel

Chief/Chef:

D. K. MacKay

Research Personnel / Personnel de recherche:

S. C. Bigras, H. A. M. Chew, M. N. Demuth, S. Fogarasi, G. Holdsworth, B. C. Kenney, M. Lapointe, P. Marsh, O. Mokievsky-Zubok, W. Nicholaichuk, R. I. Perla, T. D. Prowse, A. Wankiewicz

Current Research / Projets de recherche en cours

Hydrological Processes and Climate Change

Evaluation of the CRAE model for evaporation and evapotranspiration (Nicholaichuk)

Microwave remote sensing of basin storage (Wankiewicz)

Snow properties for remote sensing (Perla)

Multi-satellite monitoring of hydrological processes (Wankiewicz)

Proxy climate data from ice cores (Holdsworth)

Glaciological investigations of Peyto Glacier, Alberta (Holdsworth)

Mountain hydrology and glacial meltwater (Nicholaichuk)

Investigation of Coast Mountains' glaciers (Mokievsky-Zubok)

Man's Interaction with the Hydrological Cycle

Quantity and quality of irrigation return flow (Nicholaichuk)

Pesticide transport by spring run-off (Nicholaichuk)

Agricultural land drainage processes (Wankiewicz)

Snow management and snowmelt infiltration (Nicholaichuk)

Hydrology of wetlands (Nicholaichuk)

Prairie lake dynamics (Kenney)

Transport of suspended sediment (Kenney)

Physical/biological interactions in stream flow (Kenney)

Northern Water Systems

Snowmelt-run-off model for northern environments (Prowse)

Snowmelt-run-off in permafrost basins (Marsh)

Economic significance of river ice jams (Prowse)

River ice break-up advance (Prowse)

Evolution of river shoals (Lapointe)

Ice jams and water levels in the Mackenzie Delta, Northwest Territories (Bigras)

Physiographic and hydroclimatological characteristics of Peel River Basin (Bigras)

Mackenzie Delta hydrology (Marsh)

Recent Publications / Publications récentes

S. C. Bigras — *Lake Regimes, Mackenzie Delta, Northwest Territories, 1984* (Saskatoon: Environment Canada, National Hydrology Research Institute, Surface Water Division, NHRI Contribution No. 87005, 1987), 52 pp.

G. Holdsworth — The surface wave forms on the Ellesmere Island ice shelves and ice islands, in G. R. Pilkington and B. W. Danielewicz (compilers), *Workshop on Extreme Ice Features*, 3-5 November 1986, Banff, Alberta (Ottawa: National Research Council of Canada, Associate Committee on Geotechnical Research Technical Memorandum No. 141, NRCC 28003, 1987), pp. 385-403.

——— and R. LeB. Hooke, G. W. Johnson, K. A. Brugger and B. Hanson, Changes in mass balance, velocity and surface profile along a flow line in Barnes Ice Cap, 1970-1984, *Canadian Journal of Earth Sciences*, Vol. 24, No. 8 (1987), pp. 1550-1561.

P. Marsh — Factors limiting snowmelt runoff in a permafrost environment, *Proceedings, 55th Annual Western Snow Conference*, 14-16 April, Vancouver, British Columbia (1987), pp. 61-68.

——— Grain growth in a wet Arctic snow cover, *Cold Regions Science and Technology*, Vol. 14, No. 1 (1987), pp. 23-31.

——— and T. D. Prowse, Water temperature and heat flux to the base of river ice covers, *Cold Regions Science and Technology*, Vol. 14, No. 1 (1987), pp. 33-50.

——— and M.-K. Woo, Soil heat flux, wetting front advance and ice layer growth on cold dry snow covers, in P. R. Kry (compiler), *Snow Property Measurement Workshop*, 1-3 April 1985, Chateau Lake Louise, Alberta (Ottawa: National Research Council of Canada, Associate Committee on Geotechnical Research Technical Memorandum No. 140, NRCC 27594, 1987), pp. 497-524.

O. Mokievsky-Zubok — *Glacier Mass Balance for 1986 on Sentinel, Helm and Place Glaciers, British Columbia* (Saskatoon: Environment Canada, National Hydrology Research Institute, Surface Water Division, Cold Regions Section, Internal Report, 1987), 16 pp.

R. Perla — with J. Dozier and R. E. Davis, Snow microstructure measurements using stereology, in P. R. Kry (compiler), *Snow Property Measurement Workshop*, 1-3 April 1985, Chateau Lake Louise, Alberta (Ottawa: National Research Council of Canada, Associate Committee on Geotechnical Research Technical Memorandum No. 140, NRCC 27594, 1987), pp. 59-69.

———— with R. E. Davis and J. Dozier, Measurement of snow grain properties, in H. G. Jones and W. J. Orville-Thomas (editors), *Seasonal Snowcovers: Physics, Chemistry, Hydrology*, Proceedings of the NATO Advanced Studies Institute on Chemical Dynamics of Seasonal Snowcovers, 13–25 July 1986, Les Arcs, France (Dordrecht: D. Reidel Publishing Co., NATO ASI Series, Series C: Mathematical and Physical Sciences, Vol. 211, 1987), pp. 63–74.

———— and R. E. Davis, J. Dozier and E. R. LaChappelle, Dilution method for measuring liquid water in snow: field tests in a subalpine snowpack, in P. R. Kry (compiler), *Snow Property Measurement Workshop*, 1–3 April 1985, Chateau Lake Louise, Alberta (Ottawa: National Research Council of Canada, Associate Committee on Geotechnical Research Technical Memorandum No. 140, NRCC 27594, 1987), pp. 71–78.

T. D. Prowse with W. P. Adams and H. Granberg, Observations on floating snowpacks: lakes, rivers and the sea, in P. R. Kry (compiler), *Snow Property Measurement Workshop*, 1–3 April 1985, Chateau Lake Louise, Alberta (Ottawa: National Research Council of Canada, Associate Committee on Geotechnical Research Technical Memorandum No. 140, NRCC 27594, 1987), pp. 313–346.

———— The albedo of break-up ice covers, *Proceedings, 44th Annual Eastern Snow Conference*, Fredericton, New Brunswick (1987), pp. 192–196.

———— and J. C. Anderson and R. L. Smith, Discharge measurement during river ice break-up, *Proceedings, 43rd Annual Eastern Snow Conference*, 5–6 June 1986, Hanover, New Hampshire (1987), pp. 55–69.

———— and C. R. Onclin, Timing and duration of river ice breakup, *Proceedings, 44th Annual Eastern Snow Conference*, Fredericton, New Brunswick (1987), pp. 197–202.

Aquatic Ecology Division / Division d'écologie aquatique

Telephone: (306) 975-5761

Personnel

Acting Chief / Chef interimaire:

J. A. Gilliland

Research Personnel / Personnel de recherche:

M. L. Bothwell, M. Evans, T. A. Jackson, R. A. Kirkland, W. F. Warwick

Current Research / Projets de recherche en cours

Man's Interaction with the Hydrological Cycle

Prairie lake zooplankton (Evans)

River nutrient spiralling (Bothwell and Kirkland)

Accumulation of heavy metals by different species of planktonic organism and different sediment components (Jackson)

Experimental rivers research (EXTRA) (Bothwell)

Biogeochemistry of mercury and other heavy metals in different freshwater environments (Jackson)

Experimental biogeochemistry of mercury and other metals (Jackson)

Effects of humic matter on primary productivity in northern lakes (Jackson)

Pigments of algae: their possible importance on screening out harmful UV radiation (Jackson)

Biological assessment of toxic chemical effects on freshwater ecosystems: continuing studies (Warwick)

Biological assessment of toxic chemical effects on freshwater ecosystems: the Lac St-Francois study (Warwick)

Recent Publications / Publications récentes

M. Bothwell — *Phosphorous Control of Algal Production in the Thompson River, British Columbia* (Saskatoon: Environment Canada, National Hydrology Research Institute, Aquatic Ecology Division, NHRI Contribution No. 87002, 1987), 41 pp.

W. F. Warwick — and J. Fitchko, P. M. McKee, D. R. Hart and A. J. Burt, The incidence of deformities in *Chironomus* spp. from Port Hope Harbour, Lake Ontario, *Journal of Great Lakes Research*, Vol. 13, No. 1 (1987), pp. 88–92.

Scientific Information Division / Division d'information scientifique

Telephone: (306) 975-5751

Personnel

Chief / Chef:

C. S. L. Ommanney

Research Personnel / Personnel de recherche:

L. Watson

Current Research / Projets de recherche en cours

Hydrological Processes and Climate Change

Glaciers and climate change (Ommanney)

Snow and ice information and data integration (Ommanney)

Recent Publications / Publications récentes

C. S. L. Ommanney — Axel Heiberg Island bibliography, in P. Adams (editor), *Field Research on Axel Heiberg Island, NWT, Canada: Bibliographies and DataReports with Appendices of Data from the McGill Subarctic Research Station, Schefferville, PQ* (Peterborough: Trent University, Department of Geography; Montréal: McGill University, Centre for Northern Studies and Research, McGill Subarctic Research Paper No. 41, Axel Heiberg Island Research Report, Miscellaneous Papers No. 2, Occasional Paper No. 12, 1987), pp. 5–55.

——— — Axel Heiberg Island visitations, in P. Adams (editor), *Field Research on Axel Heiberg Island, NWT, Canada: Bibliographies and DataReports with Appendices of Data from the McGill Subarctic Research Station, Schefferville, PQ* (Peterborough: Trent University, Department of Geography; Montréal: McGill University, Centre for Northern Studies and Research, McGill Subarctic Research Paper No. 41, Axel Heiberg Island Research Report, Miscellaneous Papers No. 2, Occasional Paper No. 12, 1987), pp. 56–66.

——— — *Generic Terms in Canada's Geographical Names* (Ottawa: Secretary of State / Canadian Permanent Committee on Geographical Names / Energy, Mines and Resources Canada, Terminology Bulletin No. 176, 1987), 311 pp.

——— — Report of the Advisory Committee on Glaciological and Alpine Nomenclature / Rapport du comité consultatif de la nomenclature glaciologique et alpine, *Canoma*, Vol. 13, No. 2 (1987), pp. 12–15.